

APPENDIXES

APPENDIX A.—ACTUARIAL METHODOLOGY AND PRINCIPAL ASSUMPTIONS FOR COST ESTIMATES*

The basic methodology and assumptions used in the estimates for the hospital insurance program are described in this appendix.

1. Methodology

The adequacy of the financing for the hospital insurance program for the next 25 years is expressed as an actuarial balance. The actuarial balance is calculated as the difference between the average of the contribution rates specified in current law and the average of the current costs for the 25 year period, adjusted to build the trust fund to the level of a year's expenditures. The current cost for any year is the ratio of (1) the cost of benefits and administration for insured persons plus an amount required to maintain the trust fund at the level of the next year's expenditures to (2) the effective taxable payroll. In projecting the taxable payroll, it is assumed that the taxable wage base is adjusted periodically to keep pace with rising earnings.

2. Principal problems in projecting the cost of the hospital insurance program

The principal problems involved in projecting the future costs of the hospital insurance program are (1) establishing the present cost of the services provided by type of service, to serve as a base for projecting the future and (2) estimating increases in the cost of hospital services, which account for approximately 95 percent of the cost of the program.

(a) Problems involved in establishing the present cost of services incurred as a base for projecting future costs.

In order to establish a suitable base from which to project the future costs of the hospital insurance program, it is necessary to eliminate the effect of any transitory factors. The initial step is to reconstruct the incurred cost of services provided for the most recent year for which reliable estimates can be made. To do this, the nonrecurring effects of any changes in regulations or administration of the program and of any irregularities in the system of payments to providers must be eliminated. As the result of the elimination of such transitory factors, the rates of increase in the cost of the hospital insurance program differ from the increases in cash disbursements shown in Tables 5 and 6. This analysis concentrates on the long run cost of the hospital insurance program in relation to the designated sources of income.

The hospital insurance program is obligated by law to reimburse institutions for the actual reasonable cost of providing covered services to beneficiaries. Payment is initially made on an "interim" or temporary basis, with the remainder of reasonable costs paid in a series of subsequent cost settlements with the institution.

On the average, interim payments have been set at rates lower than actual costs, as recovery of any overpayment is thought to pose a serious problem. Further, there is a delay between the date on which services are performed and the date on which interim payments based on bills are made. Such delay is due to the time required (1) for the institutions to bill intermediaries; (2) for the intermediaries to query the Social Security Administration to determine the benefit period status of the patient, determine that the services are covered, and draw checks for approved services; and (3) for the institutions to present these checks for payment. An alternative method of interim reimbursement, "periodic interim payments," makes fixed payments to the hospitals at regular intervals throughout the year. These payments are based on projections of estimated reasonable costs from past experience and may vary somewhat from the actual bills submitted from month to month.

In order to adjust interim payments to the actual cost of providing covered services to beneficiaries, as determined by cost reports, a series of settlements is made with each institution. Total cost settlements have averaged around 5.5 percent of the corresponding interim payments during the early years of the program; however, the incomplete data available do not permit an accurate

*Prepared by the Office of the Actuary, Social Security Administration.

estimate of the exact amount. Due to the time required to obtain cost reports from institutions and to verify and, where appropriate, audit these reports, final settlements have lagged behind the liability for such payments by as much as several years for some institutions. The final cost of the program has not been completely determined for the most recent years of the program, and some degree of uncertainty exists even for the early years.

Additional problems are posed by changes in administrative or reimbursement policy which have a substantial effect on either the amount or incidence of payment. The extent and timing of the incorporation of such changes into interim payment rates cannot be determined precisely.

Allocating the various payments to the proper incurred period, using incomplete data and estimates of the impact of administrative actions, presents difficult problems, the solution of which can be only approximate. Under the circumstances, the best that can be expected is that the actual incurred cost of the program for a recent period can be estimated within a few percent. This increases the error of projection directly, by incorporating any error in estimating the base year into future years.

Hospital insurance program data from 1973 indicates that aged patients used an average of 3.89 days per capita of hospital services and 0.37 days per capita of skilled nursing facility services. The average reimbursement for a day of hospital care for the aged, as adjusted for anticipated final settlements with providers, was \$83.70 per day. They paid 6.3 percent of their hospital costs in the form of the inpatient deductible and coinsurance. The average reimbursement per day in skilled nursing facilities for services covered by the hospital insurance program was \$25.60. The unit reimbursement for home health services was approximately \$16.20 in 1973.

(b) Problems involved in estimating the increase in hospital costs.

In order to evaluate the adequacy of a tax schedule to support the hospital insurance program, it is necessary to relate the increases in the cost of institutional care for beneficiaries to the increases in taxable earnings which support these costs. Three principal factors should be considered: (1) aggregate increases in expenditures by institutions for producing services of the types covered by the hospital insurance program, (2) changes in the share of these expenditures that are for beneficiaries and hence will be paid by the HI program (as affected by administrative policy), and (3) resultant hospital insurance program expenditure increases. These factors, in addition to a factor indicating the differential between program costs and taxable earnings, are shown in Table A1.

TABLE A1.—COMPONENTS OF HISTORICAL AND PROJECTED LONG RANGE INCREASES IN HI HOSPITAL COSTS INCURRED, COMPARED TO THE INCREASE IN HI TAXABLE EARNINGS¹

Calendar year	[Percent]				
	Aggregate inpatient hospital costs ²	HI share of aggregate inpatient hospital costs ³	Total HI hospital costs	HI taxable earnings	Cost-earnings differential
Historical data:					
1956-65	10.4				
1966	11.7				
1967	18.6				
1968	16.5	7.0	24.6		
1969	18.4	-2.7	15.2		
1970	16.8	-4.1	12.0		
1971	13.7	.4	14.1		
1972	13.5	-3.5	9.5		
1973	10.1	4.2	14.7		
Projection:					
1974	15.0	8.9	25.2	14.3	9.5
1975	16.2	5.1	22.1	3.5	18.0
1976	15.3	.3	15.6	10.9	4.2
1977	15.2	.7	16.0	14.0	1.8
1978	14.1	1.0	15.2	12.2	2.7
1979	13.3	.8	14.2	10.5	3.3
1980	13.0	.7	13.8	9.5	3.9
1985	10.5	.7	11.3	7.1	3.9
1990	10.0	.5	10.6	6.8	3.6
1995	9.4	.3	9.7	6.7	2.8

¹ Increase in year indicated over previous year.

² See table A2.

³ See table A5.

Aggregate inpatient hospital costs have exhibited a very rapid rate (typically, 13 percent to 18 percent per year) and irregular pattern of increases. The share of hospital costs allocated to beneficiaries has also fluctuated somewhat in recent years, but it is projected to stabilize for future years under the assumption that present law and present administrative policy are retained. The changes in share for other institutional services have been substantial, as well as changes in aggregate expenditures, but these influence only 5 percent of the overall cost of the program. The primary assumption that determines the level of costs is thus the differential between the rates of increase in the hospital insurance program's share of aggregate hospital costs and in taxable earnings.

3. *Principal assumptions used in projecting the future costs of the hospital insurance system*

(a) Trends in covered hospital costs:

(1) *Analysis of data concerning past trends*

The increase in the aggregate cost of covered hospital services paid by the hospital insurance program may be analyzed into the following components:

a. Increases in aggregate inpatient hospital costs, consisting of increases due to:

1. Factor prices: the increase in unit costs that would result if every function were performed in precisely the same way by the same people and only the salaries of the people employed or the cost of the equipment and other supplies used changed.

2. Services provided and their method of provision, consisting of:

Changes in the number and composition by relative expense of services furnished (including the increase in services required to keep pace with population growth).

Changes in the method of providing the same services (including improvements to a given service, normally increasing the unit cost, and the effects of more efficient techniques or labor-saving equipment, normally decreasing the unit cost).

Incorporation of new services not previously provided (normally new, technically advanced services).

b. Increases in the hospital insurance program's share of aggregate inpatient hospital costs, consisting of increases due to:

1. Proportion of the population covered: the increase in the proportion of the general population which receives reimbursement for its hospital care under the hospital insurance program.

2. Relative amount of care paid by the hospital insurance program, consisting of:

Changes in the proportion of hospital services used by beneficiaries (including the number of services and their relative values), independent of any population change.

Changes in administrative or reimbursement policy which have an effect on the amount or incidence of payment.

It has been possible to isolate some of these elements and identify their role in previous hospital cost increases. Table A2 shows the values of the principal components of the increases for periods for which data is available, together with the projections used in the estimates.

Hospital factor prices can be divided into those for personnel and those for non-personnel expenditures. Table A3 shows the approximate increases that have occurred in these components and in overall factor costs. Slightly more than half of hospital costs are for personnel. For several years preceding the beginning of the hospital insurance program, average hospital wages and salaries (as reported by the American Hospital Association) increased at a rate of about one percent per year more than the rate of increase in earnings in OASDI covered employment. Since the beginning of the hospital insurance program this differential has ranged between 3 percent and 5 percent per year, with the exception of 1972 and 1973 during which hospital costs were subject to the Economic Stabilization Program. Increases in the prices of goods and services hospitals purchase are treated as the equivalent of increases in the Consumer Price Index, as no index of hospital non-personnel factor prices is available.

TABLE A2.—COMPONENTS OF HISTORICAL AND PROJECTED LONG-RANGE INCREASE IN AGGREGATE INPATIENT HOSPITAL COSTS INCURRED ¹

[Percent]

Calendar year	Factor prices ²	Services provided and method of provision ³	Aggregate inpatient hospital costs
Historical data:			
1956-65.....	3.6	6.8	10.4
1966.....	1.5	10.2	11.7
1967.....	6.9	11.7	18.6
1968.....	7.8	8.7	18.5
1969.....	8.0	10.4	18.4
1970.....	8.6	8.2	16.8
1971.....	8.0	5.7	13.7
1972.....	6.1	7.4	13.5
1973.....	5.4	4.7	10.1
Projection:			
1974.....	10.0	5.0	15.0
1975.....	10.4	5.8	16.2
1976.....	9.5	5.8	15.3
1977.....	9.4	5.8	15.2
1978.....	8.2	5.9	14.1
1979.....	7.1	6.2	13.3
1980.....	6.5	6.5	13.0
1985.....	5.3	5.2	10.5
1990.....	5.0	5.0	10.0
1995.....	5.0	4.4	9.4

¹ Increase in year indicated over previous year.² See table A3.³ See table A4.TABLE A3.—HISTORICAL AND PROJECTED LONG RANGE PRICE INCREASES FOR FACTORS USED BY HOSPITALS ¹

[Percent]

Calendar year	Average earnings in covered employment	Average payroll per hospital employee ²	CPI	Factor prices
Historical data:				
1956-65.....	3.7	4.7	1.7	3.6
1966.....	5.5	6	2.9	1.5
1967.....	5.7	9.3	2.9	6.9
1968.....	6.4	9.9	4.2	7.8
1969.....	6.5	9.4	5.4	8.0
1970.....	5.3	10.1	5.9	8.6
1971.....	5.4	10.3	4.3	8.0
1972.....	6.9	8.1	3.3	6.1
1973.....	6.3	4.5	6.2	5.4
Projection:				
1974.....	6.5	8.5	11.0	10.0
1975.....	6.2	11.0	9.0	10.4
1976.....	9.0	11.5	6.6	9.5
1977.....	11.0	11.5	6.5	9.4
1978.....	8.8	10.0	5.7	8.2
1979.....	7.7	9.0	4.6	7.1
1980.....	7.0	8.5	4.0	6.5
1985.....	6.0	6.5	4.0	5.3
1990.....	6.0	6.0	4.0	5.0
1995.....	6.0	6.0	4.0	5.0

¹ Increase in year indicated over previous year.² Based on data from the American Hospital Association through 1973.

Increases in hospital costs due to changes in services and how they are provided (exclusive of the effect of any change in factor costs) are analyzed on an aggregate basis. Due to lack of data, the increases are separated into a part due to population growth and a part due to all other causes, the latter being treated as a residual. Before 1966, this residual averaged slightly over 5 percent per year. After a surge in the early years of the hospital insurance program, it has declined to an average level similar to the pre-program level.

TABLE A4.—CHANGES IN SERVICES PROVIDED AND THEIR METHOD OF PROVISION, FOR INPATIENT HOSPITALS¹
[Percent]

Calendar year	Total population	Nonpopulation sources ²	Services provided and method of provision
Historical data:			
1956-65.....	1.6	5.1	6.8
1966.....	1.1	9.0	10.2
1967.....	1.1	10.5	11.7
1968.....	1.0	7.6	8.7
1969.....	1.0	9.3	10.4
1970.....	1.1	7.0	8.2
1971.....	1.0	4.7	5.7
1972.....	.9	6.4	7.4
1973.....	.7	4.0	4.7
Projection:			
1974.....	.7	4.3	5.0
1975.....	.8	5.0	5.8
1976.....	.8	5.0	5.8
1977.....	.8	5.0	5.8
1978.....	.9	5.0	5.9
1979.....	.9	5.3	6.2
1980.....	.9	5.6	6.5
1985.....	.9	4.3	5.2
1990.....	.8	4.2	5.0
1995.....	.6	3.8	4.4

¹ Increase in year indicated over previous year.

² A residual, by nature: the increase in hospital costs not explained by factor cost increases or the number of hospital employees.

Changes in the program's share of aggregate hospital costs result from changes in the proportion of the population covered (including changes due to legislation), changes in the relative number and value of services received by beneficiaries, and the effect of administrative actions defining the services eligible for reimbursement and the corresponding level of payment. Historical and projected changes in program share appear in Table A5, with changes in the proportion of the population covered netted from the other sources.

TABLE A5.—HISTORICAL AND PROJECTED LONG-RANGE INCREASES IN SHARE OF INCURRED HOSPITAL COSTS PAID BY HI¹
[Percent]

Calendar year	Proportion of population covered	Relative amount of care paid by HI	HI share of aggregate inpatient hospital costs
Historical data:			
1968.....	0.5	6.5	7.0
1969.....	.5	-3.2	-2.7
1970.....	.5	-4.6	-4.1
1971.....	.6	-2	.4
1972.....	.6	-4.1	-3.5
1973.....	² 5.3	-1.0	4.2
Projection:			
1974.....	² 5.6	3.1	8.9
1975.....	1.7	3.3	5.1
1976.....	1.3	-1.0	.3
1977.....	1.2	-5	.7
1978.....	1.0	0	1.0
1979.....	.8	0	.8
1980.....	.7	0	.7
1985.....	.5	0	.5
1990.....	.5	0	.5
1995.....	.3	0	.3

¹ Increase in year indicated over previous year.

² Reflects the extension of HI coverage to new classes of beneficiaries under the 1972 amendments.

Regulations promulgated under the Economic Stabilization program restricted several of these components of the increase in hospital costs. The Social Security Administration adopted the policy of withholding reimbursements which reflected increases in costs of more than 9 percent per year (adjusted for volume) for accounting periods beginning after the announcement of controls in August 1971, unless the hospital obtained certification of compliance from the Internal Revenue Service. This reimbursement policy establishing presumptive compliance levels had a substantial impact on aggregate reimbursable hospital cost increases; during 1972 and 1973, program cost increases (excluding the effects of new beneficiary groups) were at a lower rate than in previous years and than the rate for aggregate inpatient hospital costs.

(2) *Projection of future increases in hospital costs*

The average earnings of hospital employees have been increasing more rapidly than the average earnings of other workers over the past decade.

Historically, hospital employees earned less than similarly skilled workers in other industries. With the growth in third party reimbursement of hospitals, hospital workers began to receive higher increases in earnings than other workers. The differential has been particularly pronounced since the beginning of the hospital insurance and medicaid programs, which brought the level of third party payments up to the point that most of the financing for hospital care in the U.S. is provided through such payments. As a result, resistance to expensive increases in the quality of services and wage demands of personnel has been lessened. Under these conditions, average wages of hospital workers have been increasing from 9 percent to 10.5 percent per year since 1966 (with the exception of 1972 and 1973, which were subject to Economic Stabilization Program controls). Part of this increase in average wages has been due to a change in composition of the hospital work force so as to include relatively more higher paid personnel.

The cost estimates assume that the average increase in payroll per hospital employee will average slightly over 11 percent per year during 1975-76, somewhat higher than the rates for all workers. Eventually this difference should disappear entirely, when hospital workers' wages are comparable to those for similarly skilled personnel in other industries and the proportion of highly trained personnel grows relatively large. This has been assumed to occur by the mid-1980's as a result of public pressure on hospitals to reduce the rate of increase in their costs.

Changes in the CPI, used to measure the rate of increase in prices paid by hospitals for factors other than personnel, rose from a rate of nearly 3% per year in 1966 to a level of slightly more than 6 percent in 1973 and to a level of 11 percent in 1974. The increases beyond 1974 are projected by the rate of increase in the CPI assumed in projecting the experience of the OASDI program.

No data is available beyond 1973 pertaining to increases in costs due to changes in services and how provided. The overall rate of increase in hospital costs appears to have increased substantially from 10 percent in 1973 to 15 percent in 1974. This higher rate of increase is attributable primarily to increases in factor prices.

(b) Assumptions as to increase in the cost per capita of skilled nursing facility benefits:

The number of days of care per capita in skilled nursing facilities covered by the program dropped very sharply in 1970 and continued to decline through 1972. This is the result of strict enforcement of regulations separating skilled nursing from custodial care. The 1972 amendments extended benefits to persons who require skilled rehabilitative services regardless of their need for skilled nursing services (the former prerequisite for benefits). This change has resulted in a significant increase in services rendered in 1973 (the first effective year of the provision), with more gradual increases anticipated thereafter.

Increases in the average cost per day in skilled nursing facilities under the program are caused principally by increasing payroll costs for nurses and other skilled labor required. The average cost per day of skilled nursing facility services covered by the program remained virtually unchanged in 1973 over 1972, pre-

sumably reflecting both the impact of the 1972 amendments and the effect of the Economic Stabilization Program. The rates of increase are assumed to be comparable to the increases in general wages throughout the projection. The resulting increases in the cost per capita of skilled facility services are shown in Table A6.

(c) Assumptions as to increases in the cost per capita of home health service benefits:

A modest increase in visits per capita is projected for the next several years. It is anticipated that cost per service will increase at a rate comparable to the rate of increase in general wages. The assumptions used in the cost estimates are shown in Table A6.

TABLE A6.—PROJECTED INCREASES IN HI COST PER CAPITA FOR SKILLED NURSING FACILITIES AND HOME HEALTH AGENCIES ¹

[Percent]

Calendar year	Skilled nursing facilities	Home health agencies
1975.....	10.5	11.8
1976.....	10.3	10.3
1977.....	11.6	11.6
1978.....	9.8	9.8
1979.....	8.7	8.7
1980.....	8.0	8.0
1985.....	6.0	6.0
1990.....	6.0	6.0
1995.....	6.0	6.0

¹ Increase in year indicated over previous year.

(d) Cost estimates by type of beneficiary:

The 1972 amendments increased the scope of the program by providing protection for certain disabled beneficiaries and persons with chronic kidney disease beginning in fiscal year 1974. Estimates of the short range expenditures by type of beneficiary are summarized in Table A7, and the long range estimates as a percent of payroll are shown in Table A8.

(e) Administrative expenses:

The short range projections of administrative expenses are based on estimates of workloads and approved budgets for carriers and the Social Security Administration. The long range administrative expenses per capita are assumed to increase at 5 percent each year, 1 percent less than the increase in average earnings. Historical data showing the relationship between administrative expenses and benefits is shown in Table A9 together with projections through 1977.

(f) Interest rate:

It has been assumed that trust fund investments will earn an average of 7 percent interest per annum. The actual rate earned on the hospital insurance trust fund during fiscal 1974 was 6.7 percent.

TABLE A7.—PROJECTION OF HOSPITAL INSURANCE BENEFIT OUTLAYS, BY TYPE OF BENEFICIARY, CALENDAR YEARS 1975-1977

[In millions]

Calendar year	Aged beneficiaries	Disabled beneficiaries	Chronic kidney disease beneficiaries
1975.....	\$9,960	\$946	\$50
1976.....	11,431	1,200	58
1977.....	13,130	1,471	69

TABLE A8.—PROJECTION OF EXPENDITURES ¹ OF THE HOSPITAL INSURANCE PROGRAM, BY TYPE OF BENEFICIARY, AS A PERCENT OF TAXABLE PAYROLL

[Percent]			
Calendar year	Aged insured beneficiaries ²	Disabled beneficiaries	Chronic kidney disease beneficiaries
1975	1.56	0.16	0.01
1976	1.63	.18	.01
1977	1.65	.19	.01
1978	1.69	.20	.01
1979	1.74	.22	.01
1980	1.82	.23	.01
1985	2.27	.31	.02
1990	2.69	.38	.03
1995	3.08	.46	.04

¹ Benefits and administrative expenses.

² Excludes expenditures for uninsured beneficiaries which are reimbursed from general revenues.

TABLE A9.—RATIO OF ADMINISTRATIVE EXPENSES TO BENEFIT PAYMENTS

[Percent]	
Calendar year	Ratio
Historical data:	
1967	2.3
1968	2.4
1969	2.5
1970	3.1
1971	2.6
1972	2.9
1973	3.3
1974	3.0
Projection:	
1975	2.9
1976	2.8
1977	2.6

(g) Population:

The population projections used in this report are based on unpublished revisions to those in *Actuarial Study Number 72*, Social Security Administration.

4. *Sensitivity Testing of Long Term Cost Estimates.*

During the four-year period preceding the Economic Stabilization Program, hospital reimbursement per capita under the Hospital Insurance program increased at an average annual rate of approximately 14½ percent; during the following two years of cost controls, the average annual rate of increase was reduced to a level of approximately 8½ percent; preliminary data for 1974, decontrolled during the last 8 months, indicates a rate of increase of approximately 16½ percent. The wide differences in cost increase experience among these three periods raise significant questions concerning the implications for the future. On one side of the spectrum is the thesis that the 8½ percent increases during 1972 and 1973 represented a temporary and artificial condition, created solely by the application of cost controls to medicare reimbursement: as evidenced by the 16½ percent increase rate following the lifting of controls, reimbursable cost increases would be expected to return to a considerably higher level. On the other side of the spectrum is the argument that cost controls had only a moderate effect on medicare reimbursement and that the 8½ percent increases represent a stabilization of cost increases in the hospital sector relative to the general economy: Removal of direct controls would not be expected to have a major impact per se on anticipated rates of increase, the high rate of increase for 1974 simply reflecting inflationary surges in the general economy. The assumptions underlying the projection in this report take an intermediate position: a combination of the removal of controls and inflationary pressures in the general economy have resulted and will continue to result in cost increases in excess of the pre-control level in the immediate future but that ultimately more modest increases will be experienced.

Table A10 compares the cost of the program as projected in this report with two alternative projections, based on different assumptions as to the rate of increase in hospital costs. The first alternative shows the current cost ratios that would occur if the rates of hospital cost increase in the short range were to revert to a level consistent with the corresponding rates experienced under Medicare prior to cost controls, somewhat higher in the immediate future to reflect anticipated inflationary pressures in the general economy, and in the long range were to decrease to the level of 10½ percent per year. The second alternative shows corresponding figures that would occur if the rates of increase in the short range were to remain at a level relative to the general economy which is consistent with experience under medicare during the period of cost controls and in the long range were to decrease to the level of 6½ percent per year.

TABLE A10.—SUMMARY OF ALTERNATIVE PROJECTIONS OF THE COST OF THE HI PROGRAM

[Percent]

Year	This report	Alternative 1	Alternative 2
Assumed percent increase in hospital costs per capita			
1975.....	18.2	19.2	17.2
1976.....	14.6	16.6	12.6
1977.....	13.8	15.8	11.8
1978.....	13.0	15.0	11.0
1979.....	12.5	14.5	10.5
1980.....	12.0	14.0	10.0
1985.....	9.5	11.5	7.5
1990.....	9.0	11.0	7.0
1995.....	8.5	10.5	6.5
Current percent cost ratios and resulting actuarial balance			
1975.....	1.83	1.87	1.79
1976.....	1.91	1.99	1.84
1977.....	1.94	2.05	1.84
1978.....	1.99	2.14	1.84
1979.....	2.05	2.25	1.87
1980.....	2.13	2.37	1.91
1985.....	2.64	3.21	2.17
1990.....	3.13	4.15	2.35
1995.....	3.61	5.24	2.49
Average tax.....	2.70	2.70	2.70
Average cost.....	2.86	3.74	2.22
Actuarial balance.....	-.16	-1.04	+ .48

APPENDIX B.—SUMMARY OF PRINCIPAL PROVISIONS

Public Law 89-97, enacted July 30, 1965, amended the Social Security Act and related provisions of the Internal Revenue Code by establishing the hospital insurance program. A summary of its provisions, as amended, is as follows:

I. COVERAGE PROVISIONS (FOR CONTRIBUTION PURPOSES)

A. All workers covered by the old-age, survivors, and disability insurance system.

B. All railroad workers (the railroad retirement system collects contributions and transfers them to the hospital insurance trust fund through the financial interchange provisions).

II. PERSONS PROTECTED (FOR BENEFIT PURPOSES)

A. Insured persons—all individuals aged 65 or over who are eligible for any type of old-age, survivors, and disability insurance or railroad retirement monthly benefit (i.e., as insured workers, dependents, or survivors), without regard to whether retired (i.e., no earnings test) are eligible.

B. Noninsured persons transitionally eligible without charge—all other individuals aged 65 or over before 1968 who are citizens or aliens lawfully admitted for permanent residence with at least 5 consecutive years of residence and who are not retired Federal employees (or dependents of such individuals) covered under the Federal Employees Health Benefits Act of 1959 (including certain individuals who could have been covered if they had so elected) are eligible. Those individuals in this category attaining age 65 after 1967 must have certain amounts of OASDI (or railroad retirement) coverage to be eligible for HI benefits: 3 quarters of coverage are required for each year after 1966 and before age 65, so that the provision becomes ineffective for individuals attaining age 65 in 1975 and later, since then the "regular" OASDI insured status conditions are as easy to meet.

C. Other noninsured persons aged 65 or over—beginning July 1973, other persons over age 65 who meet the residence and citizenship requirements for transitional eligibility can elect to enroll in HI under the same conditions applicable to SMI. Continued coverage depends on payment of the standard monthly premium rate and on continued enrollment in the SMI program.

D. Disabled beneficiaries—beginning July 1973, persons under age 65 who have been entitled to disability insurance benefits for 24 months or longer are eligible, and benefits for such individuals continue for three months after the month of recovery.

E. Persons under age 65 with chronic kidney disease, requiring dialysis or renal transplant—such individuals (if fully or currently insured, or spouse of dependent child of such insured person, or a monthly beneficiary) are covered under HI, beginning with the 3rd month after month in which course of treatment began and ending with 12th month after month of transplant (or after dialysis terminated).

III. BENEFITS PROVIDED

A. Hospital benefits—the full cost of all hospital services (including room and board; operating room; laboratory tests and X-rays; drugs; dressings; general nursing services; and services of interns and residents in training) for semi-private accommodations for up to 90 days in a "spell of illness" (a period beginning with the first day of hospitalization and ending after the person has been out of a hospital or skilled nursing facility for 60 consecutive days) is provided, after payment of the inpatient deductible (\$92 in 1975), the cost of the first 3 pints of blood, and copayments of $\frac{1}{4}$ th of the inpatient deductible (\$23 in 1975) per day for the 61st through the 90th day. A lifetime reserve of 60 days with copayments of $\frac{1}{2}$ of the inpatient deductible (\$46 in 1975) is available for each eligible individual in addition to the days of coverage otherwise available (90 days per spell of illness). There is a lifetime maximum of 190 days for psychiatric hospital care. The in-

patient deductible is automatically adjusted each year to reflect changes in hospital costs (see Appendix C for the inpatient deductible promulgation for 1975).

B. Skilled nursing facility benefits—following at least 3 days of hospitalization and beginning within 14 days of leaving a hospital (under certain conditions, an additional 14-day extension may be granted), such care, which is needed on a daily basis and which can only be provided by such a facility on an inpatient basis, is provided for a period of up to 100 days in a spell of illness with copayments of one-eighth of the inpatient deductible (\$11.50 in 1975) per day for all days after the 20th.

C. Home health agency benefits—following at least 3 days of hospitalization and beginning within 14 days of leaving a hospital or skilled nursing facility, such care is provided for an amount of up to 100 visits in the next 365 days and before the beginning of the next spell of illness; these services are essentially for home-bound persons and include visiting nurse services, various types of therapy treatment, and outpatient hospital services when equipment cannot be brought to the home.

D. Services not covered—services obtained outside the United States (except for emergency services for an illness occurring in the United States or in transit in Canada between Alaska and another state, and except for illness of a U.S. resident treated in a hospital which is nearer his residence than any in the U.S.), elective “luxury” services (such as private room or television), custodial care, hospitalization for services not necessary for the treatment of an illness or injury (such as elective cosmetic surgery), services performed in a Federal institution (such as a Veterans Administration hospital), and cases eligible under workmen’s compensation are not covered.

IV. ADMINISTRATION.

The program is administered by the Social Security Administration with the Department of Health, Education, and Welfare, through fiscal intermediaries (such as Blue Cross, other health insurance organizations, and state agencies). Each provider of services can nominate a fiscal intermediary or can deal directly with the Social Security Administration. The providers of services are reimbursed on a “reasonable cost” basis, and the fiscal intermediaries are reimbursed for their reasonable costs of administration. Establishment of utilization review committees is required for hospitals and skilled nursing facilities, and the latter must develop transfer agreements with hospitals. Special reimbursement provisions apply to Health Maintenance Organizations which elect and are offered at-risk contracts which may reward them financially for more favorable operating experience.

V. FINANCING.

A. Insured persons—benefits are financed on a long range self-supporting basis (the same as for OASDI) through a separate schedule of increasing tax rates on covered workers, with the same maximum taxable earnings base as scheduled for OASDI; the same rate applies to employees, employers, and self-employed (unlike OASDI).

B. Noninsured persons transitionally eligible—benefits are financed through transfers from general revenues to the HI trust fund.

C. Other noninsured persons who enroll—benefits are financed through a standard monthly premium rate which is approximately self-supporting. The rate is \$40 in fiscal year 1976 and will be increased thereafter at the rate of increase in the inpatient deductible (see Appendix D for the premium promulgation for fiscal year 1976).

D. Non-contributory wage credits granted to persons who served in the armed forces—benefits related to these credits are financed through transfers from general revenues to the HI trust fund. The Secretary of Health, Education, and Welfare must determine the level annual appropriations to the trust fund necessary to amortize the estimated total additional costs arising from these payments.

APPENDIX C.—DETERMINATION AND ANNOUNCEMENT OF THE “1975 INPATIENT HOSPITAL DEDUCTIBLE”*

Pursuant to authority contained in section 1813(b)(2) of the Social Security Act (42 U.S.C. 1395e(b)(2)), as amended, I hereby determine and announce that the dollar amount which shall be applicable for the inpatient hospital deductible, for purposes of section 1813(a) of the Act, as amended, shall be \$92 in the case of any spell of illness beginning during 1975.

There follows a statement of the actuarial bases employed in arriving at the amount of the inpatient hospital deductible for the calendar year 1975. Certain other cost-provisions under the Hospital Insurance program are also affected by changes in the amount of the inpatient hospital deductible.

The law provides that, for calendar years after 1968, the inpatient hospital deductible shall be equal to \$40 multiplied by the ratio of (1) the current average per diem rate for inpatient hospital services for the calendar year preceding the year in which the promulgation is made (in this case, 1973) to (2) the current average per diem rate for such services for 1966. The law further provides that, if the amount so determined is not an even multiple of \$4, it shall be rounded to the nearest multiple of \$4. Further, it is provided that the current average per diem rates referred to shall be determined by the Secretary of Health, Education, and Welfare from the best available information as to the amounts paid under the program for inpatient hospital services furnished during the year by hospitals who are qualified to participate in the program, and for whom there is an agreement to do so, for individuals who are entitled to benefits as a result of insured status under the Old-Age, Survivors, and Disability Insurance program or the Railroad Retirement program.

The data available to make the necessary computations of the current average per diem rates for calendar years 1966 and 1973 are derived from individual inpatient hospital bills that are recorded on a 100 percent basis in the records of the program. These records show, for each bill, the total inpatient days of care, the interim reimbursement amount, and the total cost (the sum of interim reimbursement, deductible and coinsurance).

Each individual bill is assigned both an initial month and a terminal month, as determined from the first day covered by the bill and the last day so covered. Insofar as the initial month and the terminal month fall in the same calendar year, no problems of classification occur.

Two tabulations are prepared, one summarizing the bills with each assigned to the year in which the period it covers begins, and the other summarizing the same bills with each assigned to the year in which the period it covers ends. The true value with respect to the costs for a given year on an accurate accrual basis should fall between the amount of total costs shown for bills beginning in that year and the amount shown for bills ending in that year.

The current average per diem rate for inpatient hospital services for calendar year 1966, on the basis described, is \$37.92, while the corresponding figure for calendar year 1973 is \$85.77. It may be noted that these averages are based on about 30 million days of hospitalization in 1966 and 66 million days of hospitalization in 1973. Accordingly the ratio of the 1973 rate to the 1966 rate is 2.262.

In order to accurately reflect the change in the average per diem hospital cost under the program, the average interim cost (as shown in the tabulations) must be adjusted for (i) the effect of final cost settlements made with each provider of services after the end of its fiscal year to adjust the reimbursement to that provider from the amount paid during that year on an interim basis to the actual cost of providing covered services to beneficiaries, and (ii) for changes in the benefit structure since the base year, 1966. To the extent that the ratio of final cost to interim cost is different in the current year than it was in 1966, the increase in average interim per diem costs will not coincide with the increase in actual cost that has occurred. The inclusion of the lifetime reserve days in the current

*This statement was published in the Federal Register for Oct. 3, 1974 (Vol. 39, No. 193, pp. 35699-35700).

tabulation of the average interim per diem cost when such days were not included in the corresponding tabulation for the base year, 1966, will understate the estimate of the increase in cost that has occurred, because the average cost per day of very long confinements in a hospital is less than the average for all confinements. In order to estimate the increase in average per diem cost that has occurred, a comparison must be based on similar benefits in the two periods (1973 and 1966); thus the effect of lifetime reserve days must be eliminated from the current year tabulation.

The best data available indicates that these adjustments do not change the ratio shown above by enough to result in a different deductible for 1975. The values shown in this report do not reflect these adjustments for final cost settlements or lifetime reserve days. When the ratio of 2.262 is multiplied by \$40, it produces an amount of \$90.48, which must be rounded to \$92. Accordingly, the inpatient hospital deductible for spells of illness beginning during calendar year 1975 is \$92.

Dated: September 30, 1974.

CASPAR W. WEINBERGER,
Secretary.

APPENDIX D.—DETERMINATION AND ANNOUNCEMENT OF THE HOSPITAL INSURANCE "PREMIUM RATE FOR THE UNINSURED AGED" FOR FISCAL YEAR 1976*

Pursuant to authority contained in section 1818(d)(2) of the Social Security Act (42 U.S.C. 1395i-2(d)(2)), I hereby determine and promulgate that the hospital insurance premium, applicable for the 12-month period commencing July 1, 1975, is \$40.

Section 1818 of the Social Security Act, added by section 202 of the Social Security Amendments of 1972 (Public Law 92-603), provides for voluntary enrollment in the hospital insurance program (Part A of Medicare) by certain uninsured persons 65 and older who are otherwise ineligible. Section 1818(d)(2) of the Act requires the Secretary to determine and promulgate, during the final quarter of 1974, the dollar amount which will be the monthly Part A premium for voluntary enrollment, for months occurring in the 12-month period beginning July 1, 1975. As required by statute, this amount must be \$33 times the ratio of (1) the 1975 inpatient hospital deductible to (2) the 1973 inpatient hospital deductible, rounded to the nearest multiple of \$1, or if midway between multiples of \$1, to the next higher multiple of \$1.

Under section 1813(b)(2) of the Act, the 1975 inpatient hospital deductible was determined to be \$92. The 1973 deductible was actuarially determined to be \$76, but to comply with a ruling by the Cost of Living Council, it was promulgated at \$72. Thus, the change in the 1973 inpatient hospital deductible required by the Cost of Living Council ruling has caused an ambiguity in the use of the formula for calculating the hospital insurance premium. Using the \$72 figure in the calculation of the hospital insurance premium would result in the following computation: $\$33 \times (92/72) = \42.17 which must be rounded to \$42. If, however, the actuarially determined amount of the 1973 deductible, \$76, is used, the computation becomes $\$33 \times (92/76) = \39.95 which is rounded to \$40. The following table provides a comparison of the premium calculations to date on the two bases:

MONTHLY HOSPITAL INSURANCE PREMIUM, AS CALCULATED

Fiscal year	With 1973 deductible=\$72	With 1973 deductible=\$76
1974.....	\$33	\$33
1975.....	39	36
1976.....	42	40

The purpose of the premium formula is to adjust the original \$33 premium for changes in the cost of providing hospital care. The ratio of the inpatient hospital deductibles does this approximately, since the deductible as calculated under section 1813(b)(2), is based on the average daily cost of providing hospital care under the hospital insurance program. To use an amount for the deductible which is not at all related to the experience of the program, as in the case of the \$72 deductible for 1973, is therefore inappropriate in a formula of this type. More importantly, it was the intent of the provision that the costs of providing Part A coverage to the uninsured enrollees be covered by the enrollees themselves. As explained by the Senate Finance Committee,

"The intent is that the cost of such coverage would be fully financed through payment of a monthly premium by those who elect to enroll for this protection." (S. Rep. No. 92-1230, 92 Cong., 2nd Sess., 179 (1972)).

Assuming that the average incurred cost per premium paying enrollee is the same as the average incurred cost per insured aged enrollee, the following comparison can be made:

*This statement was published in the Federal Register for Dec. 31, 1974 (Vol. 39, No. 252, p. 45309).

COMPARISON OF PROMULGATED PREMIUM RATE WITH THE ACTUARIALLY ADJUSTED RATE

Fiscal year	Promulgated premium rate	Estimated cost per enrollee in the year	Premium less cost	Accumulated value of col. (4) for prior years ¹	Actuarially adjusted rate cols. (3) to (5)
(1)	(2)	(3)	(4)	(5)	(6)
1974.....	\$33.00	\$30.90	+\$2.10	-----	\$30.9
1975.....	36.00	36.10	- .10	+\$2.20	33.9
1976.....	40.00	41.80	-1.80	+2.20	39.6

¹ For a given year, this value is the sum of the differences shown in col. (4) for all preceding years, accumulated with interest and changes in size of enrollment.

Thus, the premium of \$40 derived by using \$76 for the 1973 inpatient hospital deductible, is adequate to cover the projected costs of the uninsured enrollees. The actuarially determined \$76 amount for the 1973 inpatient hospital deductible was used in determining the hospital insurance premium rate for the 12-month period commencing July 1, 1974.

In view of the foregoing it is appropriate that the Part A premium be calculated using the amount that was actuarially determined for the 1973 inpatient hospital deductible. It is the use of this amount which was originally foreseen by the Congress in enacting section 1818; the results of its use are more consistent with the remedial purposes of the Social Security Act; and, perhaps most importantly, it is consistent with the legislative intent that the program of hospital insurance under section 1818 be self-supporting. Accordingly, the hospital insurance monthly premium for fiscal year 1976 is \$40.

Dated December 23, 1974.

CASPAR W. WEINBERGER,
Secretary.

